

A² 13. (Amended) The method of claim 1, further comprising depositing at least one dopant coating layer on surfaces of particles of the heat-treated composition.

A³ 15. (Amended) The method of claim 1, comprising adjusting the A/B ratio of the heat-treated composition by depositing a coating comprising a barium compound on surfaces of particles of the heat-treated composition.

19. (Amended) A method for heat treating a barium titanate-based particulate composition comprising:

A⁴ hydrothermally-producing a barium titanate-based particulate composition; and
heating a barium titanate-based particulate composition at a temperature and for a time sufficient to cause particle growth and insufficient to cause particle sintering thereby forming a heat-treated particulate composition having an average particle size of at least 50% greater than an average particle size of the barium titanate-based particulate composition.

A⁵ 25. (Amended) The method of claim 19, wherein the heat-treated composition has an A/B ratio and further comprising adjusting the A/B ratio of the heat-treated composition.

Please cancel claims 3, 14, and 23 without prejudice.

Please add the following new claims:

A⁶ 31. (New) The method of claim 1, wherein the heat-treated composition has an average particle size that is greater than an average particle size of the barium titanate-based particulate composition.

32. (New) The method of claim 1, wherein the heat-treated composition has an average particle size of at least 50% greater than an average particle size of the barium titanate-based particulate composition.

33. (New) A method for heat treating a barium titanate-based particulate composition comprising:

hydrothermally-producing a barium titanate-based particulate composition; and

heating the barium titanate-based particulate composition at a temperature between about 900 °C and about 1110 °C to form a heat-treated particulate composition.

34. (New) The method of claim 33, wherein the barium titanate-based particulate composition has an average particle size of less than about 0.25 micron prior to heating.
35. (New) The method of claim 33, wherein the heat-treated particulate composition has an average particle size that is greater than an average particle size of the barium titanate-based particulate composition.
36. (New) The method of claim 33, wherein the heat-treated particulate composition has an average particle size of at least 50% greater than an average particle size of the barium titanate-based particulate composition.
37. (New) The method of claim 33, wherein the heat-treated particulate composition has an average particle size of at least 100% greater than the average particle size of the barium titanate-based particulate composition.
38. (New) The method of claim 33, wherein the heat-treated particulate composition has an average particle size of between about 0.2 micron and about 1.0 micron.
39. (New) The method of claim 33, wherein the barium titanate-based particle composition comprises substantially spherical particles before the heating step.
40. (New) The method of claim 33, wherein the heat-treated particulate composition comprises substantially spherical particles after the heating step.
41. (New) The method of claim 33, further comprising depositing at least one dopant coating layer on surfaces of particles of the heat-treated particulate composition.

42. (New) The method of claim 33, wherein the heat-treated particulate composition has an A/B ratio and further comprising adjusting the A/B ratio of the heat-treated particulate composition.

43. (New) The method of claim 42, comprising adjusting the A/B ratio of the heat-treated particulate composition by depositing a coating comprising a barium compound on surfaces of particles of the heat-treated particulate composition.

44. (New) The method of claim 33, further comprising sintering the heat-treated particulate composition.

45. (New) The method of claim 33, further comprising forming a dielectric layer from the heat-treated particulate composition.

46. (New) A method for heat treating a barium titanate-based particulate composition comprising:

heating a barium titanate-based particulate composition at a temperature between about 700 °C and about 1150 °C to form a heat-treated particulate composition, the heat-treated particulate composition having an average particle size of at least 50% greater than an average particle size of the barium titanate-based particulate composition, the heat-treated particulate composition having an A/B ratio; and

adjusting the A/B ratio of the heat-treated particulate composition.

47. (New) The method of claim 46, further comprising hydrothermally-producing the barium titanate-based particulate composition

48. (New) The method of claim 46, wherein the barium titanate-based particulate composition has an average particle size of less than about 0.25 micron prior to heating.

49. (New) The method of claim 46, wherein the heat-treated particulate composition has an average particle size of at least 100% greater than the average particle size of the barium titanate-based particulate composition.

50. (New) The method of claim 46, wherein the heat-treated particulate composition has an average particle size of between about 0.2 micron and about 1.0 micron.

51. (New) The method of claim 46, wherein the barium titanate-based particle composition comprises substantially spherical particles before the heating step.

52. (New) The method of claim 46, wherein the heat-treated particulate composition comprises substantially spherical particles after the heating step.

53. (New) The method of claim 46, further comprising depositing at least one dopant coating layer on surfaces of particles of the barium titanate-based composition.

54. (New) The method of claim 46, comprising adjusting the A/B ratio of the heat-treated particulate composition by depositing a coating comprising a barium compound on surfaces of particles of the heat-treated particulate composition.

55. (New) The method of claim 46, further comprising sintering the heat-treated particulate composition.

56. (New) The method of claim 46, further comprising forming a dielectric layer from the heat-treated particulate composition.

REMARKS

In response to the Office Action mailed March 22, 2002, Applicants respectfully request reconsideration. To further the prosecution of this application, amendments have been made to the claims, and the claims as presented are believed to be in allowable condition. Claims 1, 13, 15, 19, and 25 have been amended. Claims 3, 14, and 23 have been cancelled without prejudice. Claims 31-56 have been added. Support for the amendments and the newly added claims can be found throughout the specification and claims as originally filed. No new matter has been added. Claims 1-2, 4-13, 15-22, 24-56 are now pending.